

In the structure shown in Fig. 8, a first dielectric multilayer film 13 and a second dielectric multilayer film 23 are sequentially disposed or formed on a light-transmissive substrate 1. Another light-transmissive substrate is further bonded onto the upper side thereof.

Fig. 11 shows a structure wherein dielectric multilayer films 3 and 4 are disposed on both sides of a flat glass plate 2 as a light-transmissive substrate, and further the resultant laminate is immersed in a liquid medium 6 having substantially the same refractive index as that of the glass ~~(preferably, within the range of about~~ ~~in terms of refractive index difference)~~. When such a structure is adopted, substantially the same performance as that of the structure of Fig. 7 may be provided.

(Embodiments of structure of polarizing beam splitter)

There is described a first embodiment of the structure of the polarizing beam splitter according to the present invention.

Fig. 7 shows the structure of a polarizing beam splitter wherein a prism 1 (on which a laminate of an adjusting layer 1C and an alternate layer 13 of a first dielectric multilayer film 3 is disposed, as shown in Fig. 8), is joined with prism 2 (on which a laminate of an adjusting layer 2C and an alternate layer 23 of a second dielectric multilayer film 4 is disposed, as shown in Fig. 8) by an optical adhesive 5.